Informal Exr. Amdt. to [SPEC]

Please replace paragraph [0085] with the following amended paragraph:

[0085] A preferred starter unit for such an assembly of modules is a diketide thioester either formed *in situ* by including a module which contains a loading domain to incorporate a starter unit along with an extender unit to attain this resultant, or the diketide may be synthesized independently and used as the substrate for the PKS. The synthesized diketide may be supplied as the thioester, such as the N-acylcysteamine thioesters. Preparation methods for these thioesters are described in the above-referenced U.S. Serial No. 09/346,860 filed 2 July 1999 and the corresponding PCT application, as well as U.S. Serial No. ~~(Atty. docket No. 30062-20032.00)~~ 09/492,733 filed 27 January 2000, now U.S. patent 6,492,562.

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now U.S. Patent 6,221,641

Please replace paragraph [0097] with the following amended paragraph:

[0097] While physical channeling is a necessary outcome of fundamental polyketide biosynthetic mechanisms (Donadio, et al., *Science* 1991, *252*, 675-679; Cortes, et al., *Nature* 1990, *348*, 176-178), the kinetic advantage, if any, of channeling intermediates between modules has not yet been resolved. To elucidate the issue of "kinetic channeling" (which is defined as physical channeling that results in a kinetic advantage--as measured by k_{cat} sover a diffusive loading mechanism in which the intermediate equilibrates in the bulk phase after release from the upstream active site and before loading in the downstream active site) in modular PKSs, two new assay systems-one to probe intrapolypeptide transfers and one to probe interpolypeptide transfers--were devised that would more accurately mimic the transfer of a substrate from the acyl carrier protein (ACP) of one module to the ketosynthase (KS) of the next. These assays are described in further detail in Example 7 below. In the first assay system, the loading didomain and module 1 of DEBS generated in situ the natural diketide intermediate ((2*S*,3*R*)-2-methyl-3-hydroxy-pentanoyl-S-ACP_1), which could then be transferred to alternative downstream modules in a bimodular PKS context (Figure 10B). By comparing the kinetic parameters of these hybrid bimodular systems to those for elongation of the same diketide that has been supplied exogenously to the isolated downstream module (Figure 10A), the kinetic benefit of channeling intermediates between covalently linked modules could be evaluated. A second assay system was developed using a chemoenzymatic method, through which alternative diketides were covalently attached to the phosphopantetheine